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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/732,873	12/09/2003	John W. Matthews	SF-1	6841
25917	7590	02/15/2006	EXAMINER	
LANGLOTZ PATENT WORKS, INC.			HAN, JASON	
PO BOX 759			ART UNIT	
GENOA, NV 89411			PAPER NUMBER	
			2875	

DATE MAILED: 02/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

ELV

Office Action Summary	Application No. 10/732,873	Applicant(s) MATTHEWS ET AL.	
	Examiner Jason M. Han	Art Unit 2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 December 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 and 17-19 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-8, 11-15 and 17-19 is/are rejected.
7) ☒ Claim(s) 9 and 10 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 09 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's argument, "Ko has only the conventional single electrical path between the ends: a conductive housing" [Page 6], has been considered but is not persuasive. It is clear and apparent that the three electrical paths defined in the previous Office Action are inherently disposed between the first and second ends of the housing, and are independent due to the very nature that the paths are not connected to one another. As broadly interpreted [MPEP 2111], the prior art of Ko remains commensurate to the scope of the claim as stated by the Applicant. It should further be noted that if the switches are connected together, then they would be dependent upon one another, whereas each of the electrical paths of the switches are independently connected to the CPU (31), as clearly portrayed in Figure 4.

2. Applicant's argument, "the Ko switch 14, is an input that merely invokes a flashing signal mode in an already illuminated lamp, and does not generate a response of power delivery" [Page 6], Ko teaches, "The trigger switch 14 is connected to the input end of the microprocessor 31... By means of operating the selector switch 13 or the trigger switch 14, the microprocessor 31 is driven to control the bandwidth of the MOS field effect transistor 35, so as to regulate the intensity of light of the lamp bulb 21 steplessly, or to flash the lamp bulb" [Column 2, Lines 24-25, 30-34]. The mere fact that the switch drives the microprocessor to regulate the intensity is a clear teaching of a response to the input to deliver power from the power storage element to the lamp.

3. Applicant's arguments with respect to Claims 8-10 [Page 7] have been considered but are moot in view of the new ground(s) of rejection.
4. Applicant's argument, "The rejection is in error because it fails to point out where the cited reference discloses a controller with the capability of providing momentary illumination with the application and release of limited force, and sustained illumination upon application and release of a greater force" [Page 7], McDermott clearly teaches an electrical controller [Figures 14, 16: (48, 51); Column 1, Lines 52-58] capable of providing momentary illumination with the application and release of limited force [Column 11, Lines 4-11], as well as sustained illumination upon application and release of a greater force [Column 8, Lines 39-45; Column 9, Lines 20-24].
5. Applicant's argument, "The error is in the action's assertion that the Nilssen controller is operable to provide dimmed lamp illumination in response to an application of force" [Page 8], has been considered but is not considered persuasive. At present, the prior art of Nilssen (U.S. Patent 5498934) remains commensurate to the scope of the claim as broadly interpreted by the Examiner, whereby Nilssen teaches the controller being operable to provide illumination of the lamp at the dimmed output level in response to an application of a first degree of force on the switch [Figure 3: force applied to move the switch from the 'OFF' to 'ON' position], as well as providing illumination of the lamp at a maximum output level [Figure 3: 'MAX'] in response to application of a greater second degree of force on the switch.
6. Applicant's argument, "The first error in the rejection is in that the combination would not function" [Page 8], has been considered but is not considered persuasive.

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First, the Applicant asserts that the substitution of the resistive slider switch of Nilssen at the tail end of the flashlight would defeat the flashing feature, which is true. However, the Examiner was assuming and basing the modification of the selector switch 13 of Ko, rather than the trigger switch 14, to incorporate the Nilssen switch. This leads to Applicant's argument, "The second error in the rejection is that there is inadequate motivation to make the modification" [Page 9], which again, has been considered but not persuasive. The Examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the Examiner maintains that it would have been obvious to make the modification under the motivation to provide a user with greater control of the illumination brightness, whereby varying pressures or forces may be applied accordingly to a desired intensity preference. Such a tactile feature permits greater sensitivity to a user, and thus, command of the device, which may still be desirable to consumers. Lastly, in response to Applicant's argument that the Examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only

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from the Applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 11-13 and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant commonly recites in Claims 11-12 and 19 the controller being operable to provide momentary/sustained/cessation illumination in response to application of forces, which renders indefiniteness. Applicant should provide further elucidation within the context of the claim of how application of a force is upon the switch.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

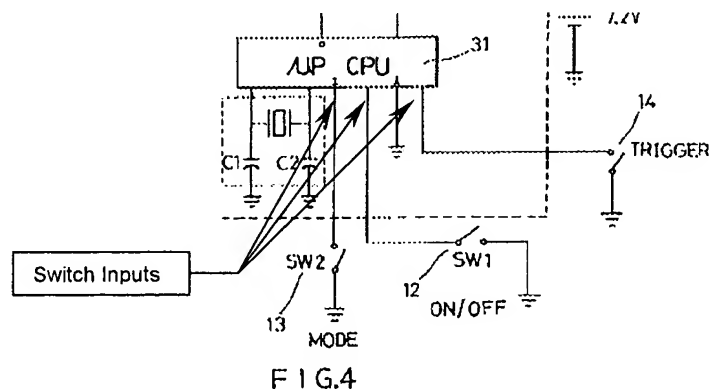
8. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Ko et al. (U.S. Patent 6307328).

9. With regards to Claim 1, Ko discloses a flashlight including:

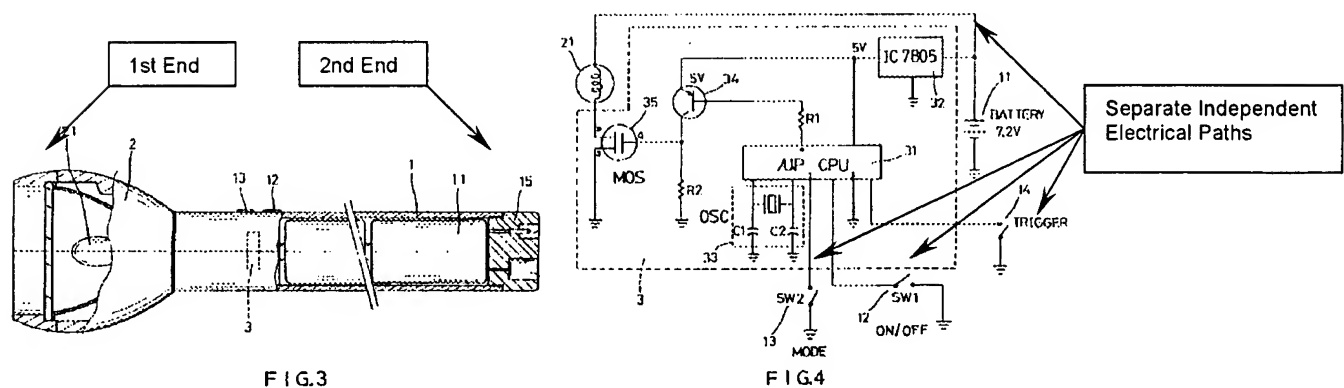
- A lamp [Figures 3-4: (21)];
- A power storage element [Figures 3-4: (11)];

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- A switch [Figures 3-4: (14) or Figures 3-4: (12-13)];
- An electronic controller [Figures 3-4: (3)];
- The controller having a switch input connected to the switch;



- The controller being operable in response to the input to deliver power from the power storage element to the lamp [Column 2, Lines 30-34, 41-46; Column 2 Line 63-Column 3, Line 1]; and
- The flashlight having an elongated housing [Figure 3: (1)] having the lamp at a first end and the switch at an opposed second end [Figure 3: (14)], and including at least two independent electrical paths between the first and second ends.



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10. With regards to Claim 2, Ko discloses the switch being operably connected directly to the switch input [Figure 4 – note drawing on top of page].

11. With regards to Claim 3, Ko discloses the controller, lamp, and power storage element being connected to each other via a power circuit bypassing the switch, such that current for illuminating the lamp does not pass through the switch [Figure 4 – note the control circuit (3) permits bypassing of all three switches (12-14)].

12. Claim 8 is rejected under 35 U.S.C. 102(b) as being anticipated by McDermott (U.S. Patent 6024471).

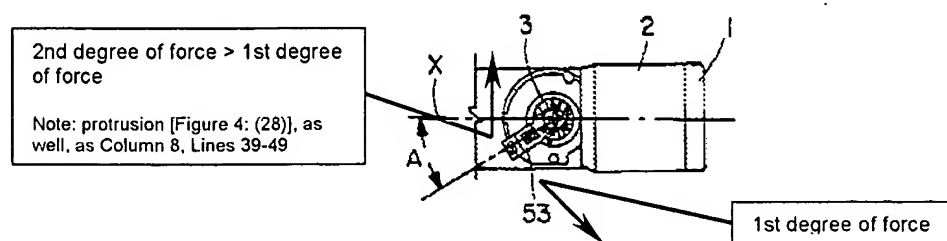
McDermott discloses a flashlight including:

- An electronic controller [Figures 14, 16: (48); Column 1, Lines 52-58];
- A lamp [Figures 3, 16: (44)] connected to the controller;
- A power storage [Figures 3, 16: (PS)] element connected to the controller;
- A switch [Figure 18: (3, 53, 59, 60)] connected to the controller;
- Whereby the switch is operable within a range of conditions [Figures 20-25] and is operable to transmit an electrical state corresponding to a condition to the controller [Column 7, Lines 13-16];
- Whereby the switch has a plurality of different electrical states in addition to an off state, wherein the electrical state is based on a degree of externally applied force [Figures 20-25]; and
- Wherein the switch is biased to the off state [Column 9, Lines 35-40].

13. Claims 11-13 are rejected under 35 U.S.C. 102(b) as being anticipated by McDermott (U.S. Patent 6024471).

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14. With regards to Claim 11, McDermott discloses a flashlight including:
- A lamp [Figures 3, 16: (44)];
 - A power storage element [Figures 3, 16: (PS)];
 - A switch [Figures 3, 18: (3, 53, 59, 60)];
 - An electronic controller [Figures 14, 16: (48, 51); Column 1, Lines 52-58] operably connected to each of the power storage element, the lamp, and the switch;
 - The controller operable to provide momentary illumination of the lamp during an application of a first degree of force [Figures 24, 26; Column 10, Lines 38-45], and to cease illumination of the lamp in response to cessation of the force [Figure 26; Column 11, Lines 4-9]; and
 - The controller operable to provide sustained illumination of the lamp in response to application of a greater second degree of force, and to maintain illumination of the lamp in response to cessation of the force [Figures 20-23; Column 8, Lines 39-49; Column 9, Lines 20-24].



15. With regards to Claim 12, McDermott discloses the controller being operable while providing sustained illumination after cessation of the force to cease illumination in response to a second application of force [Column 9, Lines 24-27].

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16. With regards to Claim 13, McDermott discloses the switch including a plurality of contacts [Figure 19], at least one of which having an associated resistor connected to present a net resistance to the controller on the degree of force applied to the switch [Column 7, Lines 13-15].

17. Claims 14-15 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Nilssen (U.S. Patent 5498934).

18. With regards to Claim 14, Nilssen discloses a flashlight including:

- A lamp [Figure 1: (LB)] with a variable light output level up to a maximum output level [Figure 3: "MAX"];
- A switch [Figure 3: (SL)] operable through a range of conditions ranging between a released position and a fully actuated position;
- A power storage element [Figure 1: (B)];
- A dimmer facility [Figure 1; (SW)] operable to select a dimmed output level below the maximum output level [Column 1, Lines 28-45];
- An electronic controller [Figure 1: (FCM)] operably connected to each of the lamp, the switch, the power storage element, and the dimmer facility;
- The controller operable to provide illumination of the lamp at the dimmed output level in response to an application of a first degree of force on the switch [Figure 3; Column 2, Lines 56-60; Column 3, Lines 37-67]; and
- The controller operable to provide illumination of the lamp at the maximum output level in response to application of a greater second degree of force on the switch [Figure 3; Column 2, Lines 56-60; Column 3, Lines 37-67].

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19. With regards to Claim 15, Nilssen discloses in response to application of the first degree of force for less than a selected duration, sustaining the illumination of the lamp at the dimmed output level after cessation of the force [Column 5, Lines 20-23].

20. With regards to Claim 19, Nilssen discloses the controller being operable to maintain the lamp in an off state in the absence of an application of force [Figure 3: "OFF"].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

21. Claims 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ko et al. (U.S. Patent 6307328) as applied to Claim 1 above, and further in view of Nilssen (U.S. Patent 5498934).

Ko discloses the claimed invention as cited above, but does not specifically teach the switch operable within a range of conditions and operable to transmit an electrical state corresponding to a condition to the controller (re: Claim 4); the switch having a plurality of different electrical states in addition to an off state, wherein the electrical state is based on a degree of externally applied force (re: Claim 5), wherein the switch includes a plurality of separate contact elements each connected to a respective electrical component, all of which are operable to contact a common contact sequentially in response to movement of a switch actuator such that the number of

separate contacts contacting the common contact is based on the degree of applied external force (re: Claim 6), and wherein the switch includes at least a resistor where the electrical states include a plurality of different resistance values (re: Claim 7).

Nilssen teaches a switch [Figure 1: (SW); Figure 3] operable within a range of conditions and operable to transmit an electrical state corresponding to a condition to a controller [Figure 1: (FCM); Column 2, Lines 18-22]; the switch having a plurality of different electrical states in addition to an off state [Figure 3], wherein the electrical state is based on a degree of externally applied force [Column 1, Lines 28-45], wherein the switch includes a plurality of separate contact elements [Figure 1: (D1, D2/TP1, TP2,)] each connected to a respective electrical component [Figure 1: (SC, SR)], all of which are operable to contact a common contact [Figure 1: (SC1, SC2)] sequentially in response to movement of a switch actuator [Figure 1: (SA)] such that the number of separate contacts contacting the common contact is based on the degree of applied external force, and wherein the switch includes at least a resistor [Figure 1: (SR)] where the electrical states include a plurality of different resistance values.

It would have been obvious to one ordinarily skilled in the art at the time of invention to modify the switch of Ko to incorporate the manual intensity switch of Nilssen in order to provide a user with greater control of the illumination brightness, whereby varying pressures or forces may be applied accordingly to a desired intensity preference. Such a tactile feature permits greater sensitivity to a user, and thus, command of the device.

22. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over McDermott (U.S. Patent 6024471).

McDermott discloses a flashlight having a light source [Figures 3, 16: (44)] with variable light output [Figures 20-25] up to a maximum output level [Figure 24; Column 10, Lines 13-15, 42-45], and a switch [Figures 3, 18: (3, 53, 59, 60)] operable through a range of conditions [Column 1, Lines 34-36] ranging between a released position and a fully actuated condition, whereby the flashlight provides:

- A dimmed level at an output less than the maximum level [Column 10, Lines 45-48];
- In response to actuating the switch to an intermediate condition between the released positioned and the fully actuated position by maintaining a first degree of force, illuminating the light source at the dimmed level [Column 10, Lines 48-51];
- In response to actuating the switch to the fully actuated condition by maintaining a second degree of force greater than the first degree of force, illuminating the light source at the maximum level [Figure 24; Column 10, Lines 13-15, 42-45]; and
- In response to cessation of force, ceasing illumination of the light source [Column 11, Lines 4-9].

Though McDermott does not specifically teach a method, it has been held an obvious matter that when all structural limitations of an apparatus have been satisfied

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by the prior art, one of ordinary skill in the art could construct a method claim for said apparatus.

23. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over McDermott (U.S. Patent 6024471) as applied to Claim 8 above, and further in view of McDermott (U.S. Patent 5161879).

McDermott ('471) discloses the claimed invention as claimed above, but does not specifically teach the switch being located at an end of the flashlight opposite the lamp.

McDermott ('879) teaches a switch member [Figures 5-6] being located at an end of the flashlight opposite to a lamp [Figure 8].

It would have been obvious to one ordinarily skilled in the art at the time of invention to modify the flashlight of McDermott ('471) to incorporate the switch member at an end of the flashlight opposite to the lamp, as taught by McDermott ('879), whereby a user may prefer to use the flashlight with a rearward grip where the thumb may access the switch at a rear end thereof. It should further be noted that it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japiske*, 86 USPQ 70.

Allowable Subject Matter

24. Claims 9-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The Applicant has sufficiently recited and narrowly defined the switch to include

a plurality of separate contact elements each connected to a respective electrical component, and all operable to contact a common contact sequentially in response to movement of a switch actuator. The prior art of record fails to teach or suggest the combination of structural elements, specifically the plurality of separate contact elements operable to contact a common contact sequentially in response to movement of a switch actuator such that the number of separate contacts contacting the common contact is based on the degree of applied external force, claimed therein, and all subsequent dependent claims are allowed.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M. Han whose telephone number is (571) 272-2207. The examiner can normally be reached on 8:00am-5:00pm.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jason M Han
Examiner
Art Unit 2875

JMH (2/8/2006)



ALAN CARIASO
PRIMARY EXAMINER